



## CLAIMS LISTING

Claims 1-111 (canceled).

**112.** (Currently Amended) A computer-implemented business method for actively and declaratively managing, implementing, and executing a first dynamic process so as to achieve explicit and measurable progress towards a business entity's objectives.  
~~incorporating a dynamic pattern of operations driven by real world conditions causing at least a first behavioral pattern to emerge~~; said computer-implemented business method comprising:

(a) incorporating a dynamic pattern of operations into the first dynamic process;

(b) identifying at least a first set of real world conditions;

(c) determining that the first set of real world conditions drives the first dynamic pattern of operations and causes at least a first behavioral pattern to emerge;

(a ~~d~~) declaring and stating an objective ~~Objective~~ of said first dynamic process as a set of measurable Goals and Constraints;

(~~b~~ e) declaring and stating at least one objective ~~Objective~~ Rule Set having a plurality of Rules, said Rules in the said objective ~~Objective~~ Rule Set being defined to accomplish at least a part of said objective ~~Objective~~ by the combination of at least one subset thereof:

wherein the Rules in said objective ~~Objective~~ Rule Set may act in any order subject to the limitation that, for any specific Rule in said objective ~~Objective~~ Rule Set, that specific Rule's Condition and applicable Constraints must be satisfied before that specific Rule's Action may occur;

1 (e f) delegating to at least one specific set of Actors consisting of at least one  
2 Actor:  
3 at least a first subordinate objective ~~Objective~~, subordinate to the objective  
4 ~~Objective~~, stating the first subordinate objective ~~Objective~~ as a subset of  
5 subordinate, measurable Goals and subordinate Constraints;  
6 a set of Rules for accomplishing said first subordinate objective ~~Objective~~;  
7 authority via at least one Rule stating authority for attaining the  
8 subordinate, measurable Goals of said first subordinate objective  
9 ~~Objective~~;  
10 accountability via at least one Rule stating accountability for attaining the  
11 subordinate, measurable Goals of said first subordinate objective  
12 ~~Objective~~; and,  
13 responsibility via at least one Rule stating responsibility for attaining the  
14 subordinate, measurable Goals of said first subordinate objective  
15 ~~Objective~~ subject to the Constraints and subordinate Constraints;  
16

17 (d g) determining if at least one Rule's Condition is satisfied and if so triggering  
18 said Rule's Action;  
19 wherein said Rule's Condition incorporates at least one Measurable value  
20 ~~Value~~ from at least one member of a set of sources; and,  
21 said set of sources comprises ~~comprise~~ a source internal to said first  
22 dynamic process, a source external to said first dynamic process, and a  
23 source in the real world;  
24

25 (e h) modifying at least one Element of said dynamic process through the Action  
26 of at least a Rule whose Condition is triggered by at least one input from an event  
27 in the real world;  
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29 (f i) defining any Actor as being at least one member of an Actor set comprising  
30 human agent, semi-automated agent, and automated agent;  
31

1 (g j) defining any Element as being one member of an Element set comprising a  
2 Goal, Rule, Rule Set, Condition, Action, Constraint, Measurable value ~~Value~~, and  
3 Delegation;

4  
5 (h k) defining each Rule so as to comprise a Condition that is satisfied when it  
6 evaluates to a specified and predetermined value and an Action that is triggered  
7 when the Condition is satisfied;

8  
9 (i l) determining the triggered Action of at least a first Rule and its relative order  
10 with respect to a second Rule's Action, and therefore the behavior of the dynamic  
11 process, at least partially by logical inference from Conditions and Constraints  
12 rather than said relative order being predetermined and required by human  
13 mandate;

14  
15 (j m) executing automatically at least a subset of the dynamic pattern of  
16 operations that progresses towards said objective ~~Objective~~, defining said subset  
17 of the dynamic pattern of operations as comprising a plurality of operations, each  
18 operation therein being temporally contiguous to at least one other operation in  
19 said subset of the dynamic pattern of operations; and,

20  
21 (k n) specifying a plurality of Elements and implementing each of the steps of  
22 declaring and stating, delegating, determining, and modifying, through a  
23 declarative and therefore non-procedural representation.

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26 113. (Previously Presented) A method as in Claim 112 further comprising iterating at  
27 least one of the steps of declaring and stating, delegating, determining, and modifying.  
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1 114. (Currently Amended) A method as in Claim 112; further comprising the step of  
2 redeclaring and restating at least one Action of at least one Rule as a second dynamic  
3 process.

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6 115. (Previously Presented) A method as in Claim 112 wherein the dynamic process  
7 represents a business's operational flow, said operational flow being that business's  
8 fundamental business activity of producing goods and services.

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11 116. (Previously Presented) A method as in Claim 112 further comprising adding at least  
12 one new Element to the dynamic process in response to at least one input.

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15 117. (Currently Amended) A method as in Claim 112 further comprising the step of using  
16 the measurable Goals and Measurable values ~~Values~~ to enable assessment of any member  
17 of a set of assessments, that set of assessments comprising risk of error, minimum  
18 contribution of any Rule to the Goal, maximum contribution of any Rule to the Goal, risk  
19 of deviation from the Goal due to the Action of any Rule, performance of at least one  
20 Actor, and relative efficiencies among any two Actors.

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23 118. (Currently Amended) A method as in Claim 112 further comprising using the  
24 deviation of Measurable values ~~Values~~ from measurable Goals for at least one member of  
25 a set comprising accounting control, regulatory control, and reporting without first  
26 requiring that the dynamic process terminate.

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29 119. (Previously Presented) A method as in Claim 112 wherein said method forms a  
30 business autopilot, which, once initiated, requires no human intervention to manage

1 successful execution of said subset of the dynamic pattern of operations even when  
2 Actions and operations are implemented by human Actors.

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5 120. (Currently Amended) A method as in Claim 112; further comprising:  
6 including a set of Constraints consisting of at least one Constraint;  
7 including a first Rule Set consisting of at least a first contained ~~Contained~~ Rule;  
8 including a second Rule Set consisting of at least a second contained ~~Contained~~  
9 Rule; and,  
10 including a set of ordering Rules consisting of at least one ordering Rule;  
11 wherein the relative order by which each first contained ~~Contained~~ Rule in the first Rule  
12 Set and at least a second contained ~~Contained~~ Rule in the second Rule Set are satisfied is  
13 determined according to at least one member of a set comprising the set of Constraints,  
14 implicit Rule precedence making the Action of each Contained Rule in the first Rule Set  
15 satisfy a Condition of the second Contained Rule, the set of Constraints, and the set of  
16 ordering Rules.

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19 121. (Currently Amended) A method as in Claim 112; further comprising declaring and  
20 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is  
21 subordinate to the first Rule Set, and wherein the second Rule Set inherits from the first  
22 Rule Set at least one Condition of a Rule in the first Rule Set as a Constraint on the  
23 second Rule Set and at least one Action of a Rule in the first Rule Set as a Goal of the  
24 second Rule Set.

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27 122. (Currently Amended) A method as in Claim 112; further comprising declaring and  
28 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is  
29 subordinate to the first Rule Set, and wherein at least one change in Constraints by Action  
30 of at least one Rule of the second Rule Set is passed to the first Rule Set.

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2 123. (Currently Amended) A method as in Claim 112; wherein said declarative and  
3 therefore non-procedural representation is at least one member of a representation set  
4 comprising symbolic logic and declarative computer language.  
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7 124. (Currently Amended) A method as in Claim 112; wherein for at least one Rule:  
8 the Condition of said Rule detects a difference between at least one Element of  
9 said dynamic process and a Measurable value ~~Value~~ from at least one input, and  
10 the Action of said Rule has an effect ~~affect~~ on at least that one Element of said  
11 first dynamic process by modifying that one Element to do at least one member of  
12 a response set comprising accommodate the Measurable value ~~Value~~, and adjust  
13 performance of said dynamic process as indicated by the Measurable value ~~Value~~.  
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16 125. (Currently Amended) A method as in Claim 112 further comprising analyzing the  
17 efficiency of a business operation by measuring the deviation of Measurable values  
18 ~~Values~~ from measurable Goals.  
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21 126. (Previously Presented) A method as in Claim 112 further comprising:  
22 incorporating a set of resolving Constraints comprising at least one member of a  
23 resolving set comprising a resolving Constraint and a resolving Rule; and,  
24 incorporating at least one ambiguous Rule;  
25 wherein said set of resolving Constraints determines whether the ambiguous Rule's  
26 Action will be triggered when the evaluation of the ambiguous Rule's Condition is not a  
27 value that has been otherwise determined to cause the ambiguous Rule's action to trigger.  
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1 127. (Previously Presented) A method as in Claim 112 wherein, in the step of delegating,  
2 at least one member of what is delegated to one specific Actor is a consequence of the  
3 Rules, Constraints, and measurements associated with an Actor.

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6 128. (Previously Presented) A method as in Claim 112 wherein at least one Element  
7 maintains consistency among any combination of authority to act, responsibility,  
8 response to operational failure, and accountability.

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11 129. (Previously Presented) A method as in Claim 112 wherein at least one Rule makes  
12 explicit why Actions are undertaken and what is to be achieved.

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15 130. (Currently Amended) A method as in Claim 112 further comprising replacing a first  
16 unrefined ~~Unrefined~~ Rule by a set of refinement Rules that include at least the Action of  
17 the first unrefined ~~Unrefined~~ Rule without the set of refinement Rules including the first  
18 unrefined ~~Unrefined~~ Rule.

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21 131. (Currently Amended) A method as in Claim 130 further comprising:  
22 incorporating a first risk of error associated with the first unrefined ~~Unrefined~~  
23 Rule;  
24 incorporating a second risk of error associated with a second refinement  
25 ~~Refinement~~ Rule belonging to the set of refinement Rules;  
26 wherein the second refinement ~~Refinement~~ Rule has the least risk of error of any  
27 refinement ~~Refinement~~ Rule in the set of refinement Rules; and wherein the second risk  
28 of error is not greater than the first risk of error.

1 132. (Currently Amended) A method as in Claim 112 wherein the step of declaring and  
2 stating at least one objective ~~Objective~~ Rule Set comprises stating at least a first objective  
3 ~~Objective~~ Rule Set and a second objective ~~Objective~~ Rule Set, wherein the first objective  
4 ~~Objective~~ Rule Set operates at a first level of the dynamic process and the second  
5 objective ~~Objective~~ Rule Set operates at a second level of the dynamic process.

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8 133. (Currently Amended) A method as in Claim 132; wherein said first and second  
9 levels are indistinct and said first objective ~~Objective~~ Rule Set and said second objective  
10 ~~Objective~~ Rule Set form a peer to peer organization.

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13 134. (Currently Amended) A method as in Claim 132; wherein said first and second  
14 levels are distinct and said first objective ~~Objective~~ Rule Set and said second objective  
15 ~~Objective~~ Rule Set form a hierarchical organization.

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18 135. (Currently Amended) A method as in Claim 112; further comprising declaring and  
19 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is  
20 subordinate to the first Rule Set, and wherein the first Rule Set further receives, from the  
21 second Rule Set, the result of an Action by a Rule of the second Rule Set as satisfaction  
22 of at least one Condition of a Rule of the first Rule Set.

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25 136. (Currently Amended) A method as in Claim 135; wherein the first Rule Set further  
26 comprises at least a superior objective ~~Objective~~ and wherein the Action of the second  
27 Rule Set conveys information to the first Rule Set sufficient for the first Rule Set to alter  
28 at least the superior objective ~~Objective~~ when the superior objective ~~Objective~~ does not  
29 conform to a Measurable value ~~Value~~ from the real world.



1 137. (Currently Amended) A method as in Claim 112; further comprising:  
2 including at least a second Rule Set comprising a set of Rules that are connected  
3 and have no Rule for which both its Condition is not satisfied by some  
4 combination of Actions and events, and its Action does not eventually in  
5 combination with the Actions of other Rules in the set satisfy the Conditions of at  
6 least one Rule;  
7 including at least a first Satisfied Rule in said second Rule Set whose Condition  
8 has been satisfied at least once;  
9 and,  
10 further including a set of pairs comprising an identification of at least one  
11 satisfied ~~Satisfied~~ Rule and a time said satisfied ~~Satisfied~~ Rule was satisfied, said  
12 set of pairs being partially ordered and constituting a first subordinate process.  
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15 138. (Previously Presented) A method as in Claim 137 wherein the second Rule Set  
16 comprises the entire set of satisfied Rules of the first dynamic process and no explicit  
17 ordering of the Rules in the second Rule Set is provided in defining said first dynamic  
18 process.  
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21 139. (Previously Presented) A method as in Claim 112 wherein said set of Rules includes  
22 at least one anticipatory Rule, the satisfaction of the Condition portion of said  
23 anticipatory Rule being merely a possibility and neither a prediction nor a mandate, when  
24 said anticipatory Rule is initially stated.  
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27 140. (Currently Amended) A method as in Claim 139 wherein said Condition of said  
28 anticipatory Rule incorporates at least one conjunct which, at the time of creation of the  
29 Rule, incorporates a Measurable value ~~Value~~ that is contrary to the known and projected  
30 state of the real world.  
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2 141. (Previously Presented) A method as in Claim 112 further comprising:  
3 storing said declarative and therefore non-procedural representation in a static and  
4 stable form; and,  
5 preserving human knowledge of said dynamic process.  
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8 142. (Currently Amended) A method as in Claim 141 further comprising the steps of  
9 organizing in a first business entity said declarative and therefore non-procedural  
10 representation of said dynamic process for conveyance to a second business  
11 entity; and,  
12 conveying said declarative and therefore non-procedural representation from the  
13 first business entity to the second business entity.  
14

15 143. (Previously Presented) A method as in Claim 141 wherein said declarative and  
16 therefore non-procedural representation of said dynamic process stores knowledge of at  
17 least one member of a set comprising organizational management, at least one model of  
18 business organization, at least one operational process, and at least one strategic process.  
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21 144. (Currently Amended) A method as in Claim 141 further comprising the steps of:  
22 retrieving at least a portion of said declarative and therefore non-procedural  
23 representation; and,  
24 instantiating said portion of said declarative and therefore non-procedural  
25 representation as a second dynamic process in a business.  
26

27 145. (Currently Amended) A method as in Claim 112 wherein the step of delegating to at  
28 least one specific Actor further comprises:  
29 a first Actor at a first level stating a plurality of business Rules comprising  
30 possible Conditions, each Condition comprising at least one member of a set  
31 comprising factual circumstance, market situation, business event, and

1 Measurable ~~value~~ Value, and joined with at least one corresponding desired  
2 Action matching a first measurable Goal;  
3 a second Actor at a second level identifying a Goal-achieving set of business  
4 Rules enabling said first measurable Goal to be attained;  
5 and,  
6 said second Actor communicating at least a first result of the Goal-achieving set  
7 of Rules to said first Actor.

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10 146. (Previously Presented) A method as in Claim 145 wherein said plurality of business  
11 Rules are responsive to a plurality of events, and wherein the actual operation of the  
12 plurality of business Rules are combined to form a business process independent of any  
13 pre-existing definition of the business process.

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16 147. (Previously Presented) A method as in Claim 145 wherein said measurable Goal is  
17 expressed as at least one Goal Rule comprising a Goal Condition which identifies said  
18 measurable Goal and a Goal Action which specifies any combination of the members of a  
19 measure set consisting of a measure of success, a measurement Constraint, and a measure  
20 of failure.

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23 148. (Currently Amended) A method as in Claim 145 wherein the first Actor further:  
24 identifies the maximum acceptable risk associated with each risky ~~Risky~~ Rule in a  
25 first risky ~~Risky~~ Rule Set at the second level;  
26 determines the risk associated with each risky ~~Risky~~ Rule; and,  
27 for each risky ~~Risky~~ Rule in the first risky ~~Risky~~ Rule Set with risk that is not  
28 below the maximum acceptable risk associated with said risky ~~Risky~~ Rule, further  
29 refines Actions of each such risky ~~Risky~~ Rule by delegating its Actions as a Goal  
30 to a third Rule Set, and the third Rule Set is at a third level.

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2 149. (Previously Presented) A method as in Claim 145 wherein the step of  
3 communicating further comprises stating at least one Rule having at least one Condition  
4 responsive to said desired Action and having an Action that performs said step of  
5 communicating.

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8 150. (Previously Presented) A method as in Claim 145 wherein said first result is a  
9 qualitative measure of at least one member of a set of measurable properties comprising  
10 performance and Goal completion.

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13 151. (Previously Presented). A method as in Claim 145 wherein said first Actor effects  
14 Delegation to at least one subordinate Actor any combination of any number of the  
15 members of a Delegation set consisting of responsibility, accountability, and authority  
16 that belong to the first Actor.

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19 152. (Previously Presented) A method as in Claim 151 wherein said first Actor further  
20 effects Delegation by a Delegation Rule comprising at least one Delegation Condition  
21 which tests the appropriateness of achieving said desired Action and at least one Action  
22 which identifies at least one Actor as recipient of said Delegation.

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25 153. (Previously Presented) A method as in Claim 152 wherein the Delegation Rule  
26 delegates authority by at least one member of a set comprising establishing at least one  
27 Rule Set, modifying at least one Rule Set, and deleting at least one Rule Set.

1 154. (Previously Presented) A method as in Claim 151 wherein the first Actor delegates  
2 authority by at least one member of a set comprising establishing at least one Rule Set,  
3 modifying at least one Rule Set, and deleting at least one Rule Set.

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6 155. (Previously Presented) A method as in Claim 151 wherein said Delegation of  
7 accountability is accomplished by enabling at least one member of a set, comprising said  
8 second Actor and said second Rule, to alter at least one member of a set comprising  
9 measurement of predefined success and measurement process.

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12 156. (Previously Presented) A method as in Claim 145 further comprising identifying a  
13 second Actor according to a Goal stated as a set of requirements Rules and a set of  
14 requirements Constraints, and according to measurements stated as a set of capabilities  
15 Rules.

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18 157. (Currently Amended) A method as in Claim 156, wherein each requirement Rule in  
19 said set of requirements Rules comprises both:

20 at least one requirements Condition identifying at least one member of a set  
21 comprising the desired Action and at least one capability required to accomplish  
22 said desired Action; and,

23 at least one requirements Action identifying at least one member of a set  
24 comprising at least one capability of said second Actor and said desired Action.

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27 158. (Currently Amended) A method as in Claim 156, wherein each capability Rule in  
28 said set of capabilities Rules consists of at least one member of a set comprising:

29 at least one capabilities Condition identifying at least one Actor and at least one  
30 capabilities Action identifying at least one capability of said Actor; and,

1 at least one capabilities Condition identifying at least one capability, and at least  
2 one capabilities Action identifying at least one Actor having said capability.  
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5 159. (Currently Amended) A method as in Claim 156, further comprising a step of  
6 matching said second Actor with said desired Goal by at least one criteria for comparing  
7 at least one requirements Rule and at least one capabilities Rule.  
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10 160. (Previously Presented) A method as in Claim 159 wherein said criteria is established  
11 using at least one member of a match set comprising a best fit match algorithm, a fuzzy  
12 match algorithm, an approximate match algorithm, and an exact match algorithm.  
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15 161. (Currently Amended) A method as in Claim 112 wherein the step of modifying at  
16 least one Element through the Action of at least a Rule whose Condition is triggered by at  
17 least one input from at least one real-world event; further comprises:  
18

19 defining a first adaptation process comprising at least one adaptation Rule;  
20

21 constructing the adaptation Rule from a third ~~Third~~ Rule and requiring in the  
22 adaptation Rule's Action at least one member of a set of Actions comprising  
23 Element creation, self-modification, feedback, contradiction resolution, conflict  
24 resolution, correction for failure, and decision making, each of which is not  
25 already any previously existing Rule's Action;  
26

27 satisfying the Condition of the adaptation Rule through an event; and,  
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29 affecting at least one Element through the Action of the adaptation Rule.  
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1 162. (Previously Presented) A method as in Claim 161 wherein said first adaptation  
2 process is independent of any external agent.

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5 163. (Previously Presented) A method as in Claim 161 further comprising monitoring  
6 performance by and against specific metrics;  
7 wherein the Condition of the adaptive Rule is satisfied by performance deviations  
8 from the specific metrics; and the Action of the adaptive Rule is representative of  
9 at least one member of a set comprising business events, business measures,  
10 business decisions, business Rules, and business processes.

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13 164. (Currently Amended) A method as in Claim 161 further comprising:  
14 modifying, through the Action of at least one adaptation Rule, at least a first  
15 changed ~~Changed~~ Rule instantiated at a first level;  
16 effectively modifying through the first changed ~~Changed~~ Rule instantiated at a  
17 first level at least a first Goal of the first level; and  
18 permitting but not requiring intervention from a higher level.

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21 165. (Currently Amended) A method as in Claim 161 further comprising:  
22 continuously monitoring for at least one occurrence of the at least one real-world  
23 event; and,  
24 continuously modifying the Elements of the dynamic process, in response to the  
25 occurrence of the at least one real-world event.

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28 166. (Currently Amended) A method as in Claim 161 further comprising:  
29 incorporating at least one member of a set of dynamic processes comprising  
30 creation, deletion, modification, and correction of both objectives ~~Objectives~~ and  
31 Elements;

1 linking the adaptation process to at least one member of the set of dynamic  
2 processes; and,  
3 modifying the objectives ~~Objectives~~ and Elements by the adaptation process  
4 according to at least one member of a set comprising Conditions and Constraints.  
5  
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7 167. (Previously Presented) A method as in Claim 161 wherein the step of modifying at  
8 least one Element comprises:  
9 detecting a contradiction;  
10 changing at least one Rule Set, further comprising:  
11 identifying at least a first and second conflicting Rule; and,  
12 resolving the contradiction by at least one member of a set comprising adding a  
13 new Constraint, altering a existing Constraint, adding a new Rule, altering at least  
14 one of the first and second conflicting Rules, and eliminating at least one of the  
15 first and second conflicting Rules; and,  
16 logically differentiating the Actions of the first and second conflicting Rules.  
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19 168. (Previously Presented) A method as in Claim 161 further comprising reducing at  
20 least one operational latency in the dynamic process through the Action of the adaptation  
21 Rule.  
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24 169. (Previously Presented) A method as in Claim 161 wherein the adaptation Rule's  
25 Condition is satisfied when a first contradiction occurs, and the adaptation Rule's Action  
26 modifies at least one Element.  
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29 170. (Previously Presented) A method as in Claim 169 wherein the first contradiction  
30 comprises at least first and second logically-conflicting Elements, and the adaptation  
31 Rule's Action selects one of the conflicting Elements through at least one member of a



1 set of selection techniques comprising random selection, deterministic selection, and  
2 arbitrary selection, and modifies the selected Element.

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5 171. (Previously Presented) A method as in Claim 170 wherein the modification of the  
6 selected Element prevents simultaneous application of the first and second logically-  
7 conflicting Elements.

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10 172. (Previously Presented) A method as in Claim 169 wherein the first contradiction  
11 comprises at least first and second logically-conflicting Elements, and the adaptation  
12 Rule's Action alters at least one of the first and second logically-conflicting Elements and  
13 creates a differentiation between the first conflicting Rule's Condition and the second  
14 conflicting Rule's Condition, said differentiation preventing the first conflicting Rule's  
15 Condition and the second conflicting Rule's Condition from being satisfied by the same  
16 set of measurable inputs and Elements.

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19 173. (Previously Presented) A method as in Claim 172 wherein the adaptation Rule's  
20 Action alters at least one of the first and second logically-conflicting Elements, modifies  
21 the first logically-conflicting Element to include a Constraint not present in the second  
22 logically-conflicting Element, and prevents the possibility of the first and second  
23 logically-conflicting Elements from simultaneously occurring.

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26 174. (Previously Presented) A method as in Claim 161 wherein the step of constructing  
27 the adaptation Rule further comprises:

28       stating the adaptation Rule's Condition to be satisfied when a first failure occurs;  
29       and,  
30       stating the adaptation Rule's Action to both incorporate modification of at least  
31       one Element and effect a correction for the first failure.

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3 175. (Previously Presented) A method as in Claim 174 wherein the first failure comprises  
4 not attaining a first Goal and the modification of at least one Element enables the first  
5 Goal to be attained by correcting at least one member of a set comprising at least one  
6 cause of the first failure and at least one effect of the first failure.

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9 176. (Previously Presented) A method as in Claim 174 wherein the modification of at  
10 least one Element includes at least one member of a set of steps comprising creating,  
11 modifying, and deleting a second adaptation Rule.

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14 177. (Currently Amended) A method as in Claim 174 wherein the first failure comprises  
15 not detecting a Measurable value ~~Value~~ and the modification of at least one Element  
16 comprises at least one member of a set comprising creating the Element, modifying the  
17 Element, and deleting the Element.

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20 178. (Currently Amended) A method as in Claim 174, wherein a second failure  
21 comprises not attaining a second Goal and the modification of at least one Element  
22 includes the step of redeclaring and restating at least one Action of at least one Rule as a  
23 second dynamic process.

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26 179. (Currently Amended d) A method as in Claim 174, wherein the first failure  
27 comprises not attaining a first Goal and the modification of at least one Element enables  
28 said first Goal to be attained by correcting at least one member of a failure set comprising  
29 at least a first cause of the first failure and at least a first effect of the first failure.

1 180. (Currently Amended) A method as in Claim 174 wherein the adaptation Rule's  
2 Action modifies at least a member Rule of the objective ~~Objective~~ Rule Set and, when the  
3 member Rule's Condition is satisfied, the member Rule's Action modifies, without  
4 human intervention, at least a first member of the set of measurable Goals.

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7 181. (Currently Amended) A method as in Claim 174 wherein the adaptation Rule's  
8 Action modifies at least a first Adaptable Rule of a set of Rules and, when the first  
9 adaptable ~~Adaptable~~ Rule's Condition is satisfied, the first adaptable ~~Adaptable~~ Rule's  
10 Action modifies, without human intervention and without modification of any Rule of the  
11 objective ~~Objective~~ Rule Set, at least a first member of a set comprising subordinate  
12 Goals and measurable Goals.

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15 182. (Currently Amended) A method as in Claim 174; wherein the step of declaring and  
16 stating at least one objective ~~Objective~~ Rule Set further comprises:  
17 stating at least a first objective ~~Objective~~ Rule Set and a second objective  
18 ~~Objective~~ Rule Set, wherein the first objective ~~Objective~~ Rule Set operates at a  
19 first level of the dynamic process and the second objective ~~Objective~~ Rule Set  
20 operates at a second level of the dynamic process;  
21 and wherein the adaptation Rule's Condition effectively defines the need for a  
22 closed-loop effect in said first level and the adaptation Rule's Action changes at  
23 least one Element in said second level.

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26 183. (Currently Amended) A method as in Claim 174; wherein the step of modifying at  
27 least one Element comprises modifying at least one member of a set comprising Goal,  
28 Rule, Rule Set, Condition, Action, Constraint, Measurable value ~~Value~~, and Delegation.

1 184. (Currently Amended) A method as in Claim 174 wherein the step of declaring and  
2 stating at least one objective ~~Objective~~ Rule Set comprises stating at least a first objective  
3 ~~Objective~~ Rule Set and a second objective ~~Objective~~ Rule Set:

4 wherein the first objective ~~Objective~~ Rule Set operates at a first level of the  
5 dynamic process and the second objective ~~Objective~~ Rule Set operates at a second  
6 level of the dynamic process; and,

7 wherein a first Goal is associated with the first level and a second Goal is  
8 associated with the second level; and the first Goal and the second Goal overlap  
9 by having a sub-goal ~~subgoal~~ in common.

10  
11  
12 185. (Previously Presented) A method as in Claim 184 further comprising modifying the  
13 overlap to avoid at least one member of a set comprising confrontation problems and  
14 race-condition problems.

15  
16  
17 186. (Currently Amended) A method as in Claim 112; wherein the step of declaring and  
18 stating at least one objective ~~Objective~~ Rule Set comprises stating at least a first objective  
19 ~~Objective~~ Rule Set and a second objective ~~Objective~~ Rule Set, wherein the first objective  
20 ~~Objective~~ Rule Set operates at a first level of the dynamic process and the second  
21 objective ~~Objective~~ Rule Set operates at a second level of the dynamic process, and  
22 further comprising an organizing Rule comprising:

23 an organizing Condition; and

24 an organizing Action;

25 and the organizing Condition is satisfied by the Condition of at least one Rule in said first  
26 objective ~~Objective~~ Rule Set and the organizing Action comprises at least the second  
27 objective ~~Objective~~ Rule Set.

1 187. (Previously Presented) A method as in Claim 186 wherein said organizing Action  
2 delegates at least one member of the set comprising a Rule Set, authority, accountability,  
3 and responsibility, and said organizing Rule creates a hierarchical Delegation.

4  
5  
6 188. (Currently Amended) A method as in Claim 112 wherein the step of declaring and  
7 stating at least one objective ~~Objective~~ Rule Set further comprises stating at least a first  
8 objective ~~Objective~~ Rule Set and a second objective ~~Objective~~ Rule Set, wherein the first  
9 objective ~~Objective~~ Rule Set operates at a first level of the dynamic process and the  
10 second objective ~~Objective~~ Rule Set operates at a second level of the dynamic process,  
11 and wherein the response to at least one Action of at least one Rule in the first objective  
12 ~~Objective~~ Rule Set becomes at least one Condition of at least one Rule in the second  
13 objective ~~Objective~~ Rule Set.

14  
15  
16 189. (Previously Presented) A method as in Claim 188 wherein the first level and the  
17 second level are identical, and at least one Rule in the first Rule Set receives at least one  
18 response of at least one Rule in the second Rule Set as its Condition.

19  
20  
21 190. (Previously Presented) A method as in Claim 141 further comprising:  
22 analyzing the business operations represented in said declarative and therefore  
23 non-procedural representation; and,  
24 refining and tuning at least one member of a set comprising Decision, Business  
25 Rule, and Business Process.

26  
27 191. (Canceled)

28  
29 192. (Currently Amended) An apparatus for actively and declaratively managing,  
30 implementing, and executing a first dynamic process incorporating a dynamic pattern of

1 operations driven by real-world Conditions, through which at least a first behavioral  
2 pattern emerges, comprising:

3  
4 static memory containing:

5 a set of measurable Goals and Constraints of said first dynamic process;

6 at least one Rule Set having a plurality of Rules:

7 wherein the Rules in said Rule Set may act in any order subject to

8 the limitation that, for any specific Rule in said Rule Set, that

9 specific Rule's Condition and applicable Constraints must be

10 satisfied before that specific Rule's Action may occur;

11 a declarative and therefore non-procedural representation of each Element,

12 and any of a set of steps of declaring, stating, delegating, determining, and

13 modifying;

14  
15 means for incorporating a dynamic pattern of operations into the first dynamic  
16 process;

17  
18 means for identifying at least a first set of real world conditions;

19  
20 means for determining that the first set of real world conditions drives the first  
21 dynamic pattern of operations and causes at least a first behavioral pattern to  
22 emerge;

23  
24 means for accepting at least one input from the real world, said input comprising a  
25 Measurable value ~~Value~~;

26  
27 means for comparing any input against the Condition of all Elements contained in  
28 the static memory;

29  
30 means for delegating to at least one specific set of Actors consisting of at least  
31 one Actor:

1 at least a first subordinate objective ~~Objective~~, subordinate to the objective  
2 ~~Objective~~, stating the first subordinate objective ~~Objective~~ as a subset of  
3 subordinate, measurable Goals and subordinate Constraints;  
4 a set of Rules for accomplishing said first subordinate objective ~~Objective~~;  
5 authority via at least one Rule stating authority for attaining the  
6 subordinate, measurable Goals of said first subordinate objective  
7 ~~Objective~~;  
8 accountability via at least one Rule stating accountability for attaining the  
9 subordinate, measurable Goals of said first subordinate objective  
10 ~~Objective~~; and,  
11 responsibility via at least one Rule stating responsibility for attaining the  
12 subordinate, measurable Goals of said first subordinate objective  
13 ~~Objective~~ subject to the Constraints and subordinate Constraints;

14  
15 means for determining if at least one Rule's Condition is satisfied and if so  
16 subsequently triggering said Rule's Action wherein said Rule's Condition  
17 incorporates at least one Measurable value ~~Value~~ from at least one member of a  
18 set of sources and said set of sources comprises ~~comprise~~ a source internal to said  
19 first dynamic process, a source external to said first dynamic process, and a  
20 source in the real world;

21  
22 means for modifying at least one Element through the Action of at least a Rule  
23 whose Condition is triggered by at least one input from an event in the real world;

24  
25 means for executing automatically at least a subset of the dynamic pattern of  
26 operations, defining said subset of the dynamic pattern of operations as  
27 comprising a plurality of operations, each operation therein being temporally  
28 contiguous to at least one other operation in said subset of the dynamic pattern of  
29 operations; ~~and~~;

1 means for specifying a plurality of Elements and implementing each of the steps  
2 of declaring and stating, delegating, determining, and modifying, through a  
3 declarative and therefore non-procedural representation;  
4  
5 means for using said set of steps of declaring, stating, delegating, determining,  
6 and modifying, to further the attainment of a Goal of said first dynamic process  
7 independent of human action; and,  
8  
9 means for iterating through the steps of declaring, stating, delegating,  
10 determining, and modifying.